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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 08/12/2010

E I du Pont de Nemours & Company

Legal Patents Wilmington, DE 19898 EXAMINER OIAN, YUN

PAPER NUMBER

ARTHNIT 1703

DATE MAILED: 08/12/2010

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/560,883	12/13/2005	Mark F. Teasley	CL2179USPCT	3646	

TITLE OF INVENTION: SULFONIMIDE CONTAINING COMPOUNDS AND THEIR USE IN POLYMER ELECTROLYTE MEMBRANES FOR ELECTROCHEMICAL CELLS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	11/12/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further a indicated unless correcte maintenance fee notificat	form should be used I correspondence including d below or directed off ions	for transmitting the ng the Patent, adva nerwise in Block 1,	ISSUE FEE an nce orders and n by (a) specifyin	d PUBLICATI notification of r ig a new corres	ON FEE (if requir naintenance fees wi pondence address;	ed). E II be and/or	Hocks 1 through 5 st mailed to the current (b) indicating a sepa	could be comp correspondence rate "FEE AD	deted where e address as DRESS" for
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10/560,883	12/13/2005	•	Mark	F. Teasley		C	L2179USPCT	3646	5
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nonprovisional	NO	\$1510		\$300	\$0	\$1810		11/12	/2010
EXAM	INER	ART UNIT	CLASS-	SUBCLASS	1				
QIAN,		1793		-494000	•				
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME AT	ondence address (or Cha //122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ess an assignee is ident n in 37 CFR 3.11. Comp	inge of Corresponde "Indication form and. Use of a Custo A TO BE PRINTED	nce (2) the register 2 register listed, n ON THE PATE ignee data will a is NOT a substitu	names of up to ts OR, alternation name of a singled attorney or a cred patent atto to name will be NT (print or typ ppear on the p tie for filing an	e firm (having as a sigent) and the name meys or agents. If n printed.	memb s of up o nam	er a 2e to e is 3eentified below, the de	cument has be	een filed for
Please check the appropri	ate assignee category or	categories (will no	be printed on the	e patent):	Individual 🚨 Cor	rporati	on or other private gro		Government
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	SMALL ENTITY state	as. See 37 CFR 1.27					TITY status. Sec 37 Cl		
NOTE: The Issue Fee and interest as shown by the r	I Publication Fee (if req ecords of the United Sta	uired) will not be ac ites Patent and Trad	cepted from anyo emark Office.	one other than t	he applicant; a regis	tered a	ttorney or agent; or th	e assignee or o	ther party in
Authorized Signature					Date				
Typed or printed name					Registration No				
This collection of informa an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this bu irginia 22313-1450. DC 13-1450.	CFR 1.311. The info U.S.C. 122 and 37 USPTO. Time will rden, should be sen O NOT SEND FEES	rmation is require CFR 1.14. This I vary depending to the Chief Info OR COMPLET	ed to obtain or r collection is est upon the indiv ormation Office ED FORMS TO	etain a benefit by th imated to take 12 m idual case. Any cor er, U.S. Patent and T D THIS ADDRESS.	e publ inutes nment Traden SENI	ic which is to file (and to complete, includin s on the amount of tin hark Office, U.S. Depo O TO: Commissioner	by the USPTO g gathering, pone you require rtment of Comfor Patents, P.C.	to process) eparing, and to complete merce, P.O. D. Box 1450,

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10/560,883	12/13/2005	Mark F. Teasley	CL2179USPCT	3646		
7:	590 08/12/2010	EXAMINER				
E I du Pont de Nemours & Company			QIAN, YUN			
Legal Patents		ART UNIT	PAPER NUMBER			
Wilmington, DE 1	9898	1703				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 770 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 770 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/560 883 TEASLEY, MARK F. Notice of Allowability Examiner Art Unit YUN OIAN 1793 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to Amendments filed on 6/3/2010. 2. The allowed claim(s) is/are 28-30. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \(\overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. T Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other . /YUN QIAN/ Examiner, Art Unit 1793

Art Unit: 1793

DETAILED ACTION

Status of Claims

Claims 28-30 remain for examination. Claim 28 is amended and narrowed in scope to cover divalent aromatic heterocyclic groups comprising heterocyclic rings with the proviso that m + n + p is equal to 2 so that the carbon atoms of the heterocyclic rings are fully substituted by fluorinated fluorosulfonyl groups

Claims 1-27 and 31-50 has been withdrawn as being drawn to non-elected inventions.

The drawings filed on December 13, 2005 are accepted by the Examiner.

EXAMINER'S AMENDMENT

This application is in condition for allowance except for the presence of claims 1-27 and 31-50 directed to an invention non-elected without traverse. Accordingly, claims 1-27 and 31-50 have been cancelled.

Allowable Subject Matter

Claims 28-30 are allowed.

The following is an examiner's statement of reasons for allowance:

The claims are novel over the closet prior art. The closest prior art is by Ragulin et al. (Izvestiya Akademii Nauk SSSR, Seriya Khimicheskaya (1969), (10), 2224-30) as discussed above.

Ragulin et al. teaches a fluorinated fluorosulfonyl tri-substituted triazine as shown below:

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However, neither Ragulin et al. nor any of the prior art of record specifically teaches or suggests an aromatic heterocyclic group di-substituted with fluorinated sulfonamide groups as per applicant claims 28-30. Therefore, the claims are novel.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUN QIAN whose telephone number is (571)270-5834. The examiner can normally be reached on Monday-Thursday, 10:00am -4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Melvin Curtis Mayes can be reached on 571-272-1234. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1793

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/YUN QIAN/ Examiner, Art Unit 1793

August 8, 2010

/Melvin Curtis Mayes/ Supervisory Patent Examiner, Art Unit 1793